09/937,255

Amendment Dated:

January 24, 2007

Reply to Office Action of: November 03, 2006

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

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## Listing of Claims:

1. (Currently Amended) A remote-control transmitter comprising:

a plurality of keys, each of said keys closing a respective switch contact upon being depressed;

a microcomputer coupled to said keys for generating a respective signal in response to each of said keys being depressed; and

a transmission circuit coupled to said microcomputer for transmitting said signal;

wherein the microcomputer is operable to:

- store for each of said keys respective indications of whether or not each respective switch contact is detected as having been closed responsive to respective depression of said keys, said respective indications maintained in storage simultaneously,
- transfer said indications after said indications have been stored and simultaneously maintained.

be shifted to a test mode,

store indications of which of said contacts are detected as transitioning from an open state to a closed state after the test mode is initiated, said contacts indicated as transitioning from said open state to said closed state responsive to respective depression of said keys, and

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transfer said indications of which of said contacts are detected as transitioning from said open state to said closed state to said transmission circuit.

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- 2. (Previously Presented) The remote-control transmitter according to claim 1, wherein said transmission circuit transmits said signal as one of an infrared ray signal and a radio signal.
- 3. (Previously Presented) The remote-control transmitter according to claim 1, wherein said signal additionally carries an identification signal that identifies said microcomputer.
- (Previously Presented) A remote-control transmitter according to claim
   wherein said transmission circuit transmits said signal as one of an infrared ray signal and a radio signal.
- 5. (Currently Amended) A method of testing a remote-control transmitter, said method comprising the steps of:

providing said remote control transmitter, which includes: a plurality of keys, each of said keys closing a respective switch contact upon being depressed, with a microcomputer coupled to said keys for generating a respective signal in response to each of said keys being depressed, and a transmission circuit coupled to said microcomputer for transmitting said signal;

## wherein the microcomputer is operable to:

a) store for each of said keys respective indications of whether or not each respective switch contact is detected as having been closed responsive to respective depression of said keys, said respective indications maintained in storage simultaneously,

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b) transfer said indications after said indications have been stored and simultaneously maintained.

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shifting the microcomputer to a test mode;

storing indications of which of said contacts are detected as transitioning from an open state to a closed state after the test mode is initiated, said contacts indicated as transitioning from said open state to said closed state responsive to respective depression of said keys;

transferring said indications of which of said contacts are detected as transitioning from said open state to said closed state to the transmission circuit; and examining a signal generated responsive to said transferring.

- 6. (Previously Presented) The method of testing the remote-control transmitter according to claim 5, wherein the transmission circuit transmits said signal as one of an infrared ray signal and a radio signal.
- 7. (Previously Presented) The method of testing the remote-control transmitter according to claim 5, wherein said signals additionally carries an identification signal that identifies the microcomputer.
- 8. (Previously Presented) A method of testing a remote-control transmitter according to claim 7, wherein the transmission circuit transmits said signal as one of an infrared ray signal and a radio signal.
  - 9. (Currently Amended) A remote-control transmitter comprising:
- a plurality of keys activating switch contacts upon being depressed, respectively;

a microcomputer operable to:

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a) store for each of said keys respective indications of whether or not each respective switch contact is detected as having been closed responsive to respective depression of said keys, said respective indications maintained in storage simultaneously,

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b) transfer said indications after said indications have been stored and simultaneously maintained.

be shifted to a test mode.

store indications of which of said-contacts are detected as transitioning from an open state to a closed state after the test mode is initiated, said contacts indicated as transitioning from said open state to said-closed state responsive to respective depression of said keys,

and

transfer the stored indications of which of said contacts are detected as transitioning from said open state to said closed state.

10. (Currently Amended) A method of testing a remote-control transmitter, said method comprising:

providing a remote-control transmitter including: a plurality of keys activating switch contacts upon being depressed, respectively, with a microcomputer coupled to said switch contacts; and a transmission circuit coupled to the microcomputer;

wherein the microcomputer is operable to:

a) store for each of said keys respective indications of whether or not each respective switch contact is detected as having been closed responsive to respective depression of said keys, said respective indications maintained in storage simultaneously,

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b) transfer said indications after said indications have been stored and simultaneously maintained shifting the microcomputer to a test mode;

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storing indications of which of said contacts are detected as transitioning from an open state to a closed state after the test mode is initiated, said contacts indicated as transitioning from said open state to said closed state responsive to respective depression of said keys;

transferring the stored indications of which of said contacts are detected as

transitioning from said open state to said closed state to said transmission circuit; and

examining signals corresponding to the transferred indications.

- 11. (Previously Presented) A remote-control transmitter according to claim

  1, wherein transfer of said indications is delayed until after more than one of said indications of transitioning of said contacts has been stored.
- 12. (Previously Presented) A remote-control transmitter according to claim 1, wherein one of said keys is detected as not transitioning despite being depressed.